



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,951	12/13/2001	Juergen Krieger	PHB71676	2703
7590	10/27/2003		EXAMINER	
Michael M. Rickin ABB Inc. 29801 Euclid Avenue - 4U6 Wickliffe, OH 44092-1898			CYGAN, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/021,951

Applicant(s)

KRIEGER ET AL.

Examiner

Michael Cygan

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-8, 13, 16-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 16-21, 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 4, 6 and 25 is/are rejected.
- 7) ☒ Claim(s) 5, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 25 June 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 September 2003 has been entered.

### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in EPO on 20 December 2000. It is noted, however, that applicant has not filed a certified copy of the 00127903 application as required by 35 U.S.C. 119(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 4, 6, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Aikin (US 4,916,938). Aikin discloses the claimed invention, including a method for determining leaks at the seal of a valve stem (rod), comprising determining the pressure as a function of time in a control volume between two valve rod seals [26,34,36] and using the pressure to calculate the leak flow rate (pressure decay rate), and using the leakage rate value to determine if the seals need to be replaced; see Figure 2, column 4, line 63 through column 5, line 15. By replacing the seals [34,36], the fluid in the control volume is emptied (i.e., through main flow passage [14]) through a discontinuous opening of the control volume which is then closed again; see column 5, lines 16-18. The pressure rise is then measured again; see column 5, lines 18-24. As set forth in step 1 of the method at column 4, line 65 through column 5, line 3 and at column 6, lines 6-32, the pressure of the closed control volume (which is limited by the control valves shown in Figure 3) reaches an upper pressure level (point D on the graph of Figure 4) which decays to a low closed pressure level (point E on the graph of Figure 4), before the pressure is released and the stuffing box lifted out of the valve as set forth in step 2 of the method at column 5, lines 4-15. The upper and lower pressure levels are recorded by a pressure sensor [61] as a function of the pressure in the control volume and closed time (see Figure 4), as well as the state

equations of the working medium (column 5, lines 44+). Note that the fluid of Aiken is a working fluid (i.e., a fluid which is acting on the valve) which is controlled by the valve since the valve can act to pass or inhibit the fluid.

***Allowable Subject Matter***

4. Claims 13, 16-21, 23, and 24 are allowed.
5. Claims 5, 7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: The prior art neither discloses nor makes obvious the method of pressure switch actuation of venting means or determining the degree of soiling of a filter; or a device having either a filter connected upstream of a flow resistance or a switching valve actuated by a pressure switch or relief valve, all of the above in combination with the other positively recited limitations of the claims.

***Response to Arguments***

7. Applicant's arguments filed 23 September 2003 have been fully considered but they are not persuasive. Note that the fluid of Aiken is a

Art Unit: 2855

working fluid (i.e., a fluid which is acting on the valve) which is controlled by the valve since the valve can act to pass or inhibit the fluid. If applicant desires to claim that the fluid leaking into the control volume leaks from outside the control volume through a valve-rod seal, than such a limitation should be positively recited in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is 703-305-0846. The examiner can normally be reached on 8:30-6 M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Michael Cygan  
Examiner  
Art Unit 2855